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## **ABSTRACT**

A method for characterizing a geometric element of an object includes positioning a calibrated target adjacent a calibration geometric element, the calibrated target having at least two differentially detectable features having a known geometric relationship to each other. Next a relationship of the calibrated target to the calibration geometric element is determined, and the calibrated target is moved adjacent a geometric feature of an object desired to be characterized. Then photogrammetry is applied to the calibrated target features and the desired geometric feature to spatially characterize the desired geometric feature. A system for characterizing a geometric element of an object includes the movable calibrated target and a photogrammetric analysis system for determining a relationship of the calibrated target to a calibration geometric element and for spatially characterizing the desired geometric feature using the calibrated target features.